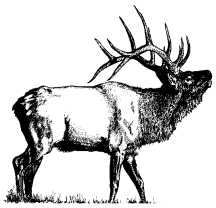

Elk Population Assessment
of the
Greater Clam Lake Elk Range
Wisconsin Department of Natural Resources - March 7th, 2018

The following is a late-winter 2018 population estimate and projected spring population size for the elk that occupy the Clam Lake Elk Range in Ashland, Bayfield, Price, Sawyer, and Taylor County.

- The Clam Lake Elk Herd consists of several spatially-distinct sub-herds.

- The 2018 population estimate is derived using a combination of methods.
    - First, there are the number of elk that are known because they have radio-collars, which were either placed on elk during winter 2018 elk trapping or in prior years.
    - Secondly, there are direct observations of collared and uncollared elk by staff. Some of these direct observations are incidental, but there is also a concerted effort by staff to count all elk in the smaller sub-herds.
    - Thirdly, there are 2 Snapshot Wisconsin camera grids, which encompass the area inhabited by the two largest elk sub-herds. Office of Applied Science staff have used data from these cameras and statistical population-estimation methods to generate elk population estimates for these sub-herds. These methods corroborate population estimates generated from the tallies described above.
        - Bulls are more difficult to count than cows/calves, so in addition to tallying marked and directly-observed bulls, we derived a minimum bull count for the largest sub-herd (the Clam Lake sub-herd) using a DNR trail-camera grid. Using photos taken during fall, DNR staff tallied the minimum number of bulls, based largely on antler characteristics and individual markings (collars and/or ear tags).

- Due to their more sedentary nature and tendency to live in stable social groups, cows and calves are easier to account for; a very high proportion of cows and calves are marked.

- Past intensive data collection on the Clam Lake Elk Herd has yielded very good information of over-winter mortality rates and birth rates from young, prime-age, and very old cows. Combining this information with the current population estimate and cow age-structure, we are able to project the post-calving population size.

<u>Final Conclusions:</u>

- Tallying numbers of cows, calves, and bulls across all elk sub-groups in the Clam Lake Elk Herd, there was likely 180-187, as of mid-March 2018.

- Assuming typical mortality between mid-March and spring/summer calving, and typical birth rates, we expect 44-45 calves will be born during spring/summer 2018.

- Given the mid-March population estimate, little or no late-winter and spring mortality, and the expected addition of calves this spring, the elk population could peak ~ 224 – 232 elk. Of course, some elk will die before all elk calves are born, so the true peak number may be somewhat fewer.

Based on the above information, the Elk Advisory Committee of the DNR is highly confident that the Clam Lake Elk Herd will exceed 200 elk in 2018 and recommends that an elk hunt occur this fall with a harvest quota of 10 bulls.